



**Air Quality Permitting  
Statement of Basis**

**February 21, 2004**

**Permit to Construct No. P-040117**

**Gas Transmission Northwest Corp., Samuels**

**Facility ID No. 017-00037**

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**Final**

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## Acronyms, Units, and Chemical Nomenclatures

AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
GTN	Gas Transmission Northwest Corporation
HAPs	Hazardous Air Pollutants
IDAPA	a numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
MACT	Maximum Achievable Control Technology
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO <sub>x</sub>	nitrogen oxides
NSPS	New Source Performance Standards
PM <sub>10</sub>	particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
PSD	Prevention of Significant Deterioration
PTC	permit to construct
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO <sub>2</sub>	sulfur dioxide
TAPs	toxic air pollutants
T/yr	tons per year
VOC	volatile organic compound

## 1. PURPOSE

The purpose for this memorandum is to satisfy the requirements of IDAPA 58.01.01.200, Rules for the Control of Air Pollution in Idaho, for issuing permits to construct.

## 2. FACILITY DESCRIPTION

Gas Transmission Northwest Corp. (GTN) operates a network of compressor stations that transmit natural gas from Canada to California along an underground pipeline system. The Samuels compressor station is one of three GTN stations located in Idaho; the other stations are located near the cities of Eastport and Athol.

The dual mainline of the network of compressor stations is 612.5 miles in length and includes 639.2 miles of 36-inch and 589.8 miles of 42-inch pipeline. The pipeline enters the United States in northern Idaho, continues through southeastern Washington and central Oregon, and enters California at its northern border. Each compressor station consists of one or more turbine-driven compressors that move the natural gas through the pipeline. The turbines use the natural gas in the pipeline as fuel and provide energy for the compressors to induce the flow of the gas.

## 3. FACILITY / AREA CLASSIFICATION

The facility is defined as a Prevention of Significant Deterioration (PSD) major facility because the emissions of NO<sub>x</sub> are greater than 250 tons per year. The Standard Industrial Classification (SIC) code for the facility is 4922. The AIRS classification is "A" because the potential to emit of NO<sub>x</sub> is at major source levels.

The facility is located within AQCR 63 and UTM zone 1. This facility is located 12 miles north of Sandpoint, Idaho in Bonner County. Although Sandpoint and the surrounding area is considered nonattainment for particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM<sub>10</sub>) emissions, this facility lies outside the PM<sub>10</sub> nonattainment area. This facility is located in an area that is unclassifiable for all criteria air pollutants.

The AIRS information provided in Appendix A defines the classification for each regulated air pollutant at GTN. This required information is entered into the EPA AIRs database.

## 4. APPLICATION SCOPE

Gas Transmission Northwest Corporation (GTN) is proposing to revise PTC No. 017-00037 issued on March 24, 2003. The facility is requesting that performance testing requirements within the permit be changed to reflect 40 CFR 60, Subpart GG's requirement to test within the achievable minimum and maximum operating range of the turbine. In addition, as a result of a corporate name change announced October 27, 2003, GTN has also requested a change in the name of the facility from PG&E Gas Transmission, Northwest Corporation to Gas Transmission Northwest Corporation. The corporate address and responsible official have also been revised.

### 4.1 Application Chronology

August 13, 2004	DEQ received application
September 9, 2004	DEQ declared application complete.

**5. PERMIT ANALYSIS**

This section of the Statement of Basis describes the regulatory requirements for this PTC action.

**5.1 Equipment Listing**

There are no equipment changes associated with this permit revision. For a complete equipment listing see the technical memorandum dated April 1, 2002.

**5.2 Emissions Inventory**

There is no increase in emissions associated with this permit revision. For a description of the emissions and calculations see the technical memorandum dated April 1, 2002.

**5.3 Modeling**

Since emissions did not increase, ambient air modeling is not required.

**5.4 Regulatory Review**

This section describes the regulatory analysis of the applicable air quality rules with respect to this PTC.

IDAPA 58.01.01.209.04 ..... Revisions to Permits to Construct

This rule establishes the requirements for permit revisions. Because emissions are not increasing, a public comment period is not required.

40 CFR 60 ..... New Source Performance Standards (NSPS)

The 4A turbine is affected by, and must comply with, 40 CFR 60 Subpart GG. The NSPS requirements for the turbine have already been incorporated into the permit, and include the EPA's October 17, 2000 changes to 40 CFR 60.331 and 335.

**5.5 Fee Review**

In accordance with IDAPA 58.01.01.224, a permit application fee of \$1,000 is required for a PTC. The application fee was submitted August 10, 2004. This permit revision requires no engineering analysis; therefore, a PTC processing fee of \$250 is required. The processing fee was received November 16, 2004.

The facility is a major facility as defined in IDAPA 58.01.01.008.10 and is therefore subject to registration and registration fees in accordance with IDAPA 58.01.01.387. The facility is current with its registration fees.

**6. PERMIT CONDITIONS**

This section lists only those permit conditions that have changed or have been deleted as a result of this permit revision. All other permit conditions remain unchanged. Permit condition related to the revised permit are identified as Revised Permit Condition. Permit conditions related to the existing permit are identified as Existing Permit Condition.

- 6.1 Existing Permit Condition 2.11.2 has been revised to more accurately reflect the emission testing requirements of 40 CFR Subpart GG. Specifically, staff have removed the specific load points at which the unit was to be tested at, and revised the existing permit condition to reflect how 40 CFR 60.335(b)(2) allows the unit to be tested at four load points in the normal operating range of the gas turbine, including the minimum point in the operating range and the maximum achievable load point, if 90-to-100% of peak load cannot be physically achieved in practice. This change also reflects the facilities request to test the unit within its normal operating range, and align the language of Revised Permit Condition 2.11.2 with 40 CFR 60, Subpart GG.
- 6.2 Existing Permit Condition 2.12.2 has been revised to be consistent with language contained in other permits issued to facilities similar to GTN. Existing Permit Condition 2.12.2 has also be revised to remove the reference to, and replace it with the language of, 40 CFR 60.331
- 6.3 Existing Permit Condition 2.6 has been revised at the request of GTN to state that Unit 4a shall only operate in non-SoLoNO<sub>x</sub> mode during periods of startup, shutdown, and load change. On August 13, 2002, GTN demonstrated that the minimum speed at which Unit 4a can reliably operate in SoLoNO<sub>x</sub> mode, and remain in compliance with the emission limits of Permit Condition 2.6, is 91% gas generator speed. Existing Permit Condition 2.6 has been changed to reflect this. Existing Permit Condition 2.6 originally stated that Unit 4a shall only operate at a gas generator speed of 90.0% or less during periods of startup, shutdown, and load change.

## 7. PUBLIC COMMENT

An opportunity for public comment period on the PTC application was provided, in accordance with IDAPA 58.01.01.209.01.c. During this time, there were no comments on the application and no requests for a public comment period on DEQ's proposed action.

## 8. RECOMMENDATION

Based on review of application materials, and all applicable state and federal rules and regulations, staff recommend that GTN be issued a final PTC No. P-040117 for the revision of the testing requirements of Unit 4A. No public comment period is recommended, no entity has requested a comment period, and the project does not involve PSD requirements.

ABC/sd Permit No. P-040117

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**APPENDIX A**

**AIRS INFORMATION TABLE**

# AIRS/AFS<sup>a</sup> FACILITY-WIDE CLASSIFICATION<sup>b</sup> DATA ENTRY FORM

Facility Name: Gas Transmission Northwest Corp.,  
 Facility Location: Samuels  
 AIRS Number: 017-00037

AIR PROGRAM POLLUTANT	SD	RSD	NSPS (Part 60)	NSPS/MS (Part 63)	MSRPS (Part 63)	SMPS	TITLE V	AREA CLASSIFICATION A - Above U - Unclassified B - Below
SO <sub>2</sub>	B		B					
NO <sub>x</sub>	A	A	A				A	
CO	A						A	
PM <sub>10</sub>	B							
PT (Particulate)	B							
VOC	B							
THAP (Total HAPs)	B							
			<b>APPLICABLE SUBPART</b>					
			GG					

<sup>a</sup> Aerometric Information Retrieval System (AIRS) Facility Subsystem (AFS)

<sup>b</sup> AIRS/AFS Classification Codes:

- A = Actual or potential emissions of a pollutant are above the applicable major source threshold. For HAPs only, class "A" is applied to each pollutant which is at or above the 10 T/yr threshold, or each pollutant that is below the 10 T/yr threshold, but contributes to a plant total in excess of 25 T/yr of all HAPs.
- SM = Potential emissions fall below applicable major source thresholds if and only if the source complies with federally enforceable regulations or limitations.
- B = Actual and potential emissions below all applicable major source thresholds.
- C = Class is unknown.
- ND = Major source thresholds are not defined (e.g., radionuclides).